

## Goal J2: Improve Safety

- Fatality Information
- Collision Information
- Safety Program
- Run-off-Road and Crossover Crashes
- Intersection Crashes
- Pedestrian Fatalities
- Pedestrian and Bicycle Education and Safety
- Inspection of Commercial Vehicles
- Inspection of Commercial Vehicle Drivers
- Inspection of Commercial Vehicles Carrying Hazardous Materials
- Portable Weighs
- OSHA Recordable Incident Rate

## Fatality Information

### **Background**

Safety is a key customer requirement. It is of highest priority with our customers and is of utmost concern to the Cabinet as well. However, recognize that the Transportation Cabinet does not have the scope of authority to control all influences of highway fatalities. The information we collect is useful to us as an indicator of potential opportunities of preventive action.

### **Purpose**

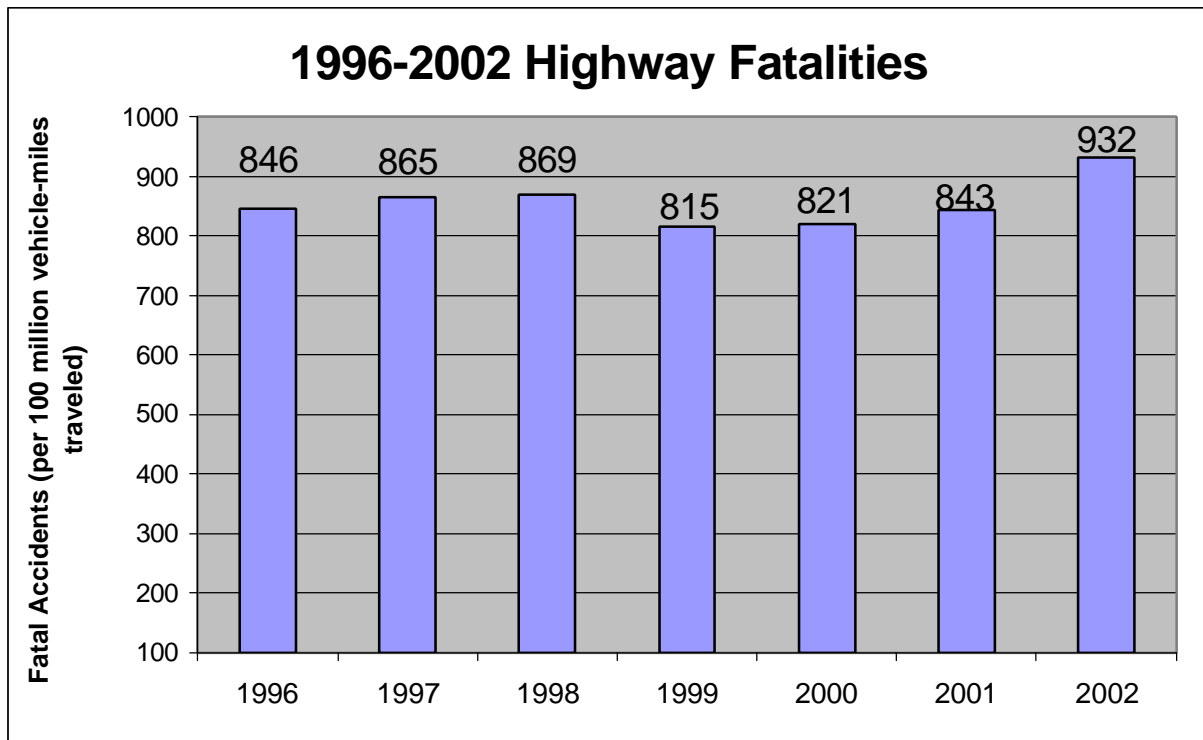
The measurements provided below track statewide fatality information. It provides a measure of highway safety in Kentucky.

### **Method**

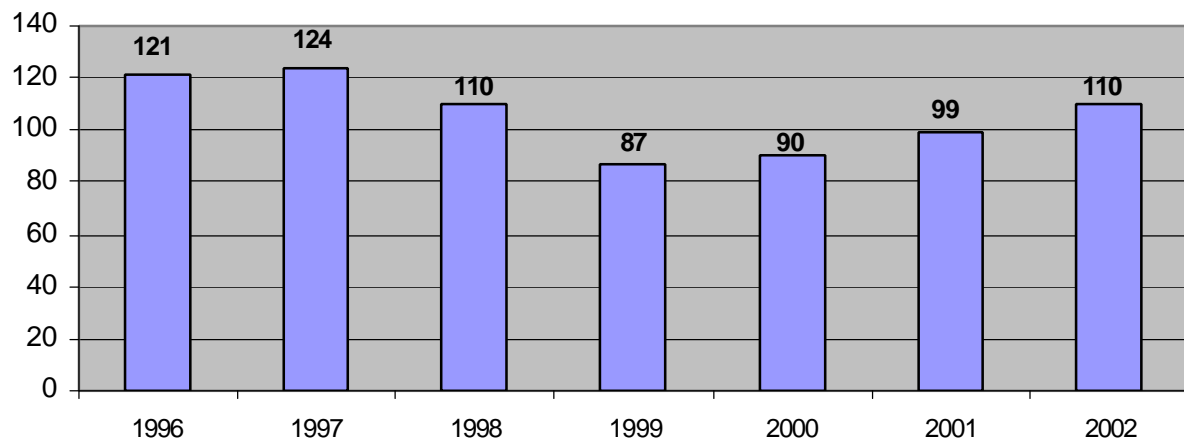
All Kentucky police agencies submit accident information to the Kentucky State Police. The State Police put this information into a database called KARS (Kentucky Accident Reporting System). This information is forwarded to the Cabinet's Division of Traffic and Vehicle Enforcement. Within the Division of Traffic, the Accident Surveillance Section makes the information available for Cabinet studies. Data for this measurement is collected on a calendar year basis, so data for 2003 is not available at this time.

### **Improvement/Results**

Improvement is shown by a decrease in the rate. There has been a slight increase in the number of highway fatalities on Kentucky's roadways in 2002. A factor for the increase was the increase of vehicular traffic, as reported in the Kentucky Transportation Center's 2002 Crash Rate Report.



### Commercial Vehicle Related Fatalities 1996 Through 2002



## Collision Information

### **Background**

Reducing the collision rate in Kentucky will reduce injuries and costs. The Cabinet does not have the scope of authority to control all influences of highway collision causing injuries, but we feel it is important to report this measure as an indication of potential opportunities of preventive action.

### **Purpose**

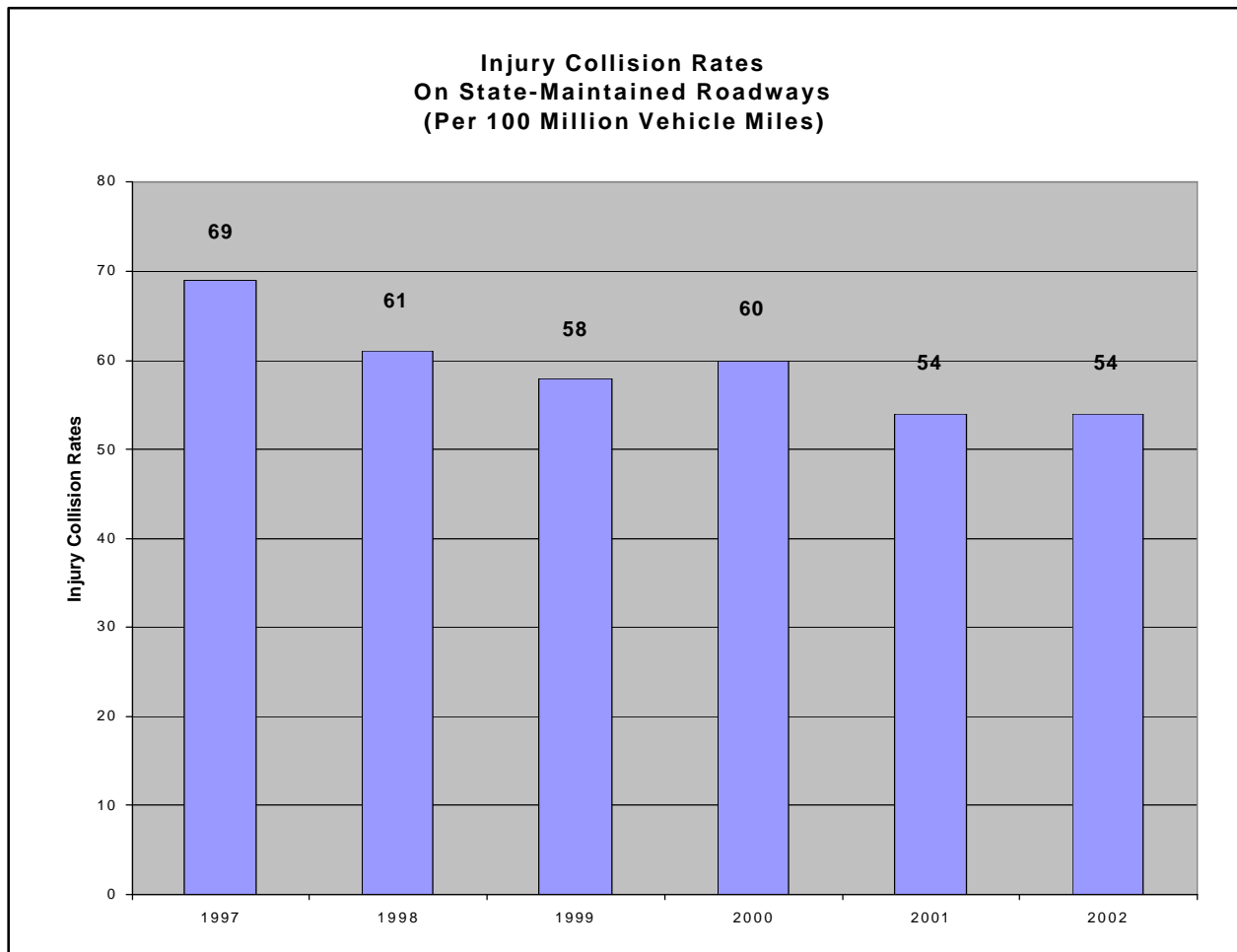
The measurements provided below track statewide collision rates on the state-maintained roadway system. It provides a measure of highway safety in Kentucky.

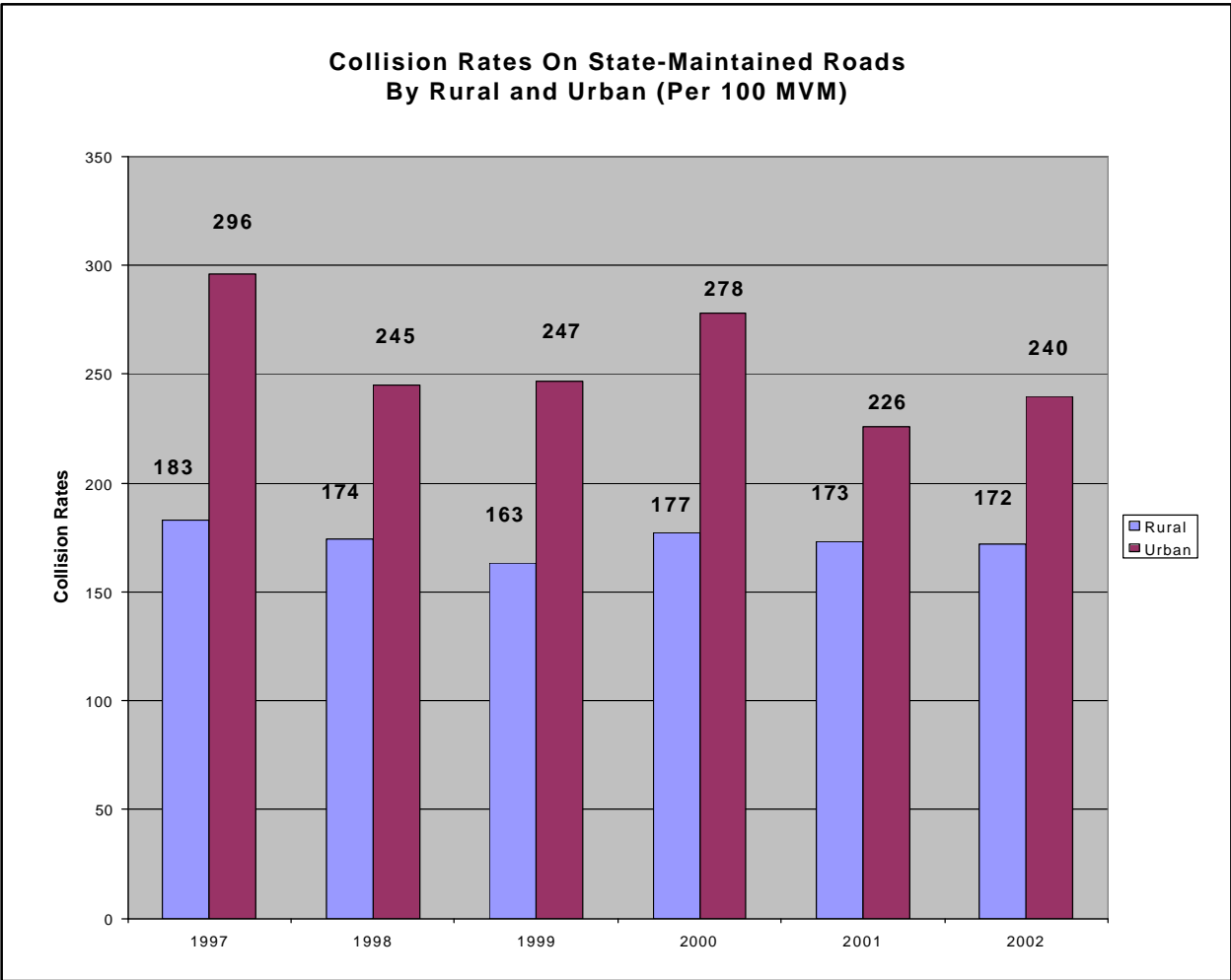
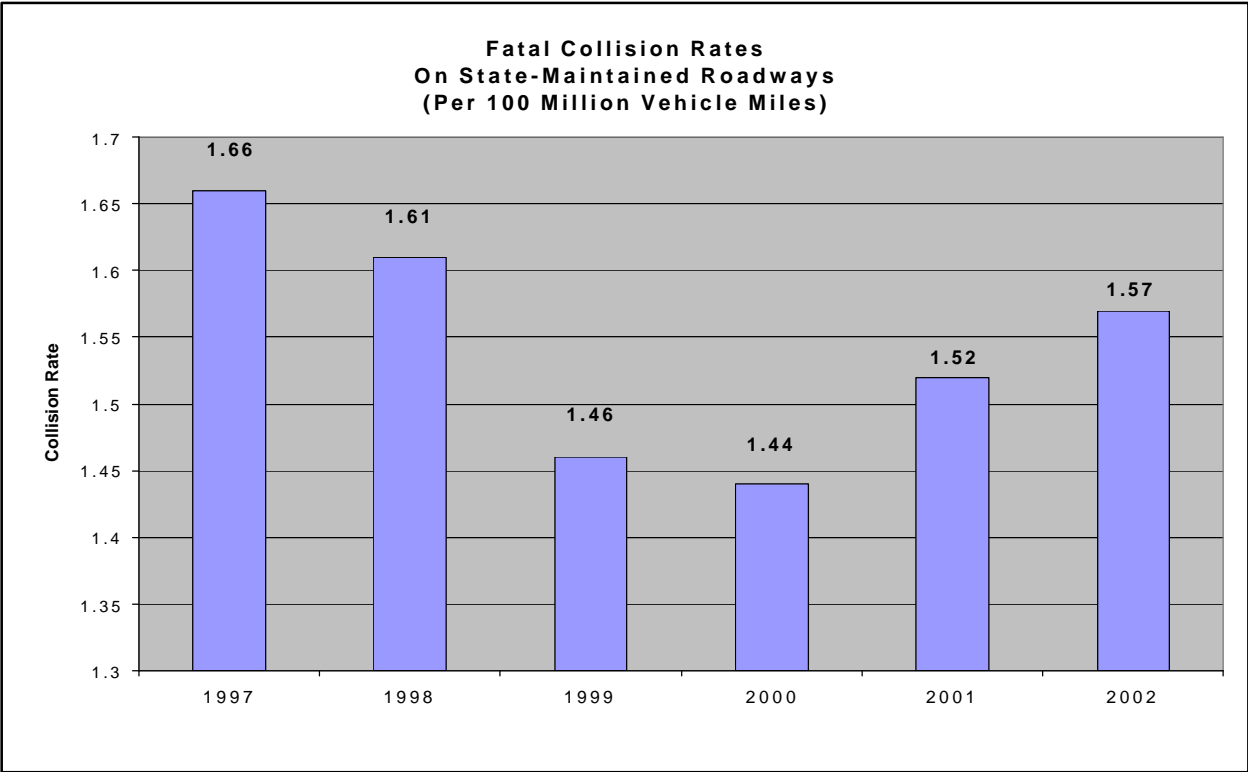
### **Method**

All police agencies in Kentucky submit collision information to the central computer databank managed by the Kentucky State Police. The Cabinet's Divisions of Traffic and Vehicle Enforcement use this information for safety analysis, programming of projects and enforcement. The Accident Surveillance Section, within the Division of Traffic, uses this information to conduct studies for identifying high collision locations and roadway collision trends. The results of these studies then feed the Hazard Elimination Program, the Spot/Section Improvement Program, the Drive Smart Program, and all other Cabinet programs relating to collision data and safety.

### **Improvement/Results**

Improvement is shown by a decrease in the collision rates.





## **Safety Program**

This measure and information is under construction. Efforts are underway to improve our safety program(s). Some of the initiatives in the works include:

- Seek ways to enhance the integration of safety considerations into the Intermediate Planning Process
- Conduct various public safety campaigns
- Issue technical advisories
- Document information for roadside design guidelines

## **Run-Off-Road and Crossover Crashes**

This measure and information is under construction. Efforts are underway to develop activities to reduce these types of crashes. Some of the initiatives in the works include:

- Make run-off-road and median cross over crashes an emphasis area under the hazard elimination program
- Implement technical advisory on rumble strips
- Provide guardrail training

## **Intersection Crashes**

This measure and information is under construction. Efforts are underway to identify activities to reduce these types of accidents. Some of the initiatives in the works include:

- Conduct intersection safety audits on high crash locations
- Provide training and information on roundabouts
- Conduct red light running campaigns

## **Pedestrian Fatalities**

This measure and information is under construction. Efforts are underway to identify activities to reduce these types of fatalities. Some of the initiatives in the works include:

- Provide training and information to implement new Pedestrian/Bicycle Policy
- Create a system for collecting data on pedestrian and bicycle fatalities
- Conduct pedestrian and bicycle safety campaigns

## **Pedestrian and Bicycle Education and Safety**

Pedestrian and bicycle safety is a point of emphasis of the pedestrian and bicycle program in the Division of Multimodal Programs. Recent measures taken to improve bicycle and pedestrian safety include: the printing of pedestrian and bicycle program safety information and regulations on the Official State Highway map; the distribution of pamphlets regarding bicycle safety to various organizations, at the Kentucky State Fair and at other events; the distribution of bright yellow bags with pedestrian and bicycle safety information; and the distribution of reflective safety strips for the increased safety of pedestrians traveling at night. In 2002, KYTC also enacted a Pedestrian and Bicycle Travel Policy to reinforce the inclusion of pedestrian and bicyclists' needs into all of our road construction activities. The entire policy can be found at the following website: <http://www.kytc.state.ky.us/Multimodal/bicycle.htm>

## Inspection of Commercial Vehicles

### Background

Inspections dealing with Commercial Vehicles safety impact the rate of compliance to both safety standards and the protection of the infrastructure of the highways of the Commonwealth.

### Purpose

Measuring and tracking the percentage of vehicles that comply to safety standards ensures us that the trucking industry and its representatives are striving to provide safe transport methods. Further, vehicles that comply with weight restrictions are less likely to damage our highways, which in turn decreases maintenance costs on our roads. The objective of inspection of Commercial Vehicles is to continually improve safety and ensure safe mobility and access to traveling public.

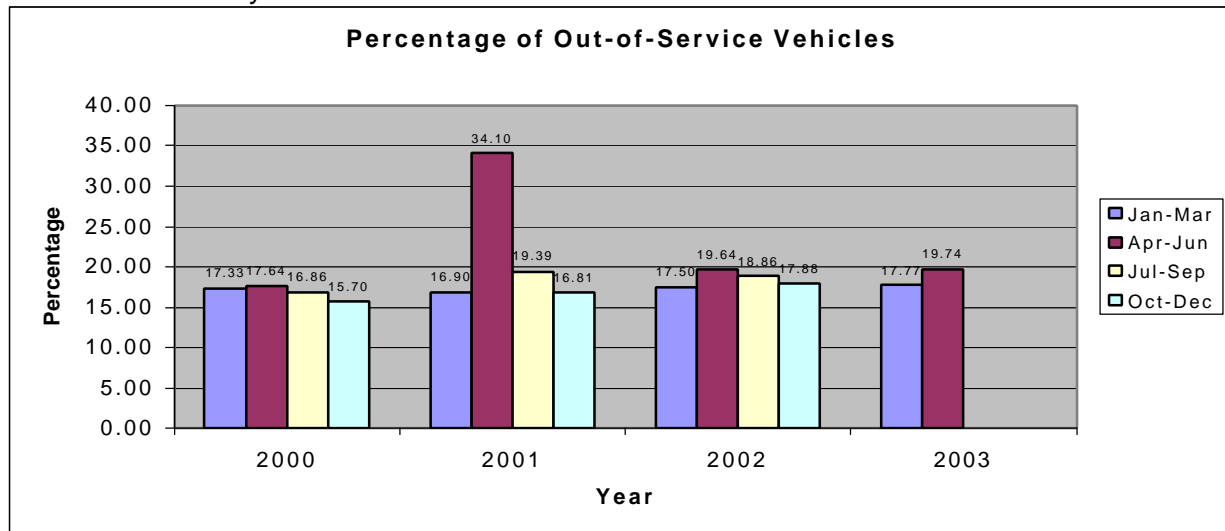
### Method

Immediate action is required when Out-of-Service violations are found during an inspection. Additionally, once a Kentucky Vehicle Enforcement (KVE) Officer or Inspector has completed an inspection using the North American Standard Vehicle Safety Inspection, data collected from the associated paperwork are entered into a Federal database called SafetyNet. The SafetyNet program offers comparison reports showing quarterly statistics of Kentucky's Commercial Vehicle compliance rates.

This year a new method of computing the Out-of-Service Rate was started. The Out-of-Service Vehicles Percentages are based on all Safety Inspections completed. Included in all figures are Motor Carrier Safety Assistance Program (MCSAP)-eligible North American Standard Safety Inspections, including commercial vehicles, hazardous material carriers, and eligible bus inspections. Figures for the last four years have been recalculated to reflect this change.

### Improvement/Results

Lowered percentages in Out-of-Service rates may indicate that the Commercial Vehicle industry and its representatives are striving to provide safe transport methods by complying with regulations. Kentucky's intent is to meet the national safety averages (25.1%) and to help set a standard for a safety-conscious level.



#### **KVE Officers and Inspectors Completed:**

**75,676 Vehicle Inspections in 2000**

**79,672 Vehicle Inspections in 2001**

**106,990 Vehicle Inspections in 2002**

**2003 Inspections Not Available Yet**

— — — 25.1 = National Average

## Inspection of Commercial Vehicle Drivers

### Background

Programs and inspections dealing with Drivers of Commercial Vehicles impact the rate of compliance to safety standards.

### Purpose

Measuring and tracking the percentage of drivers that comply to safety standards ensures us that the trucking industry and its representatives are striving to provide safe transport methods and are doing their part to keep Kentucky's roadways safe for all motor vehicles.

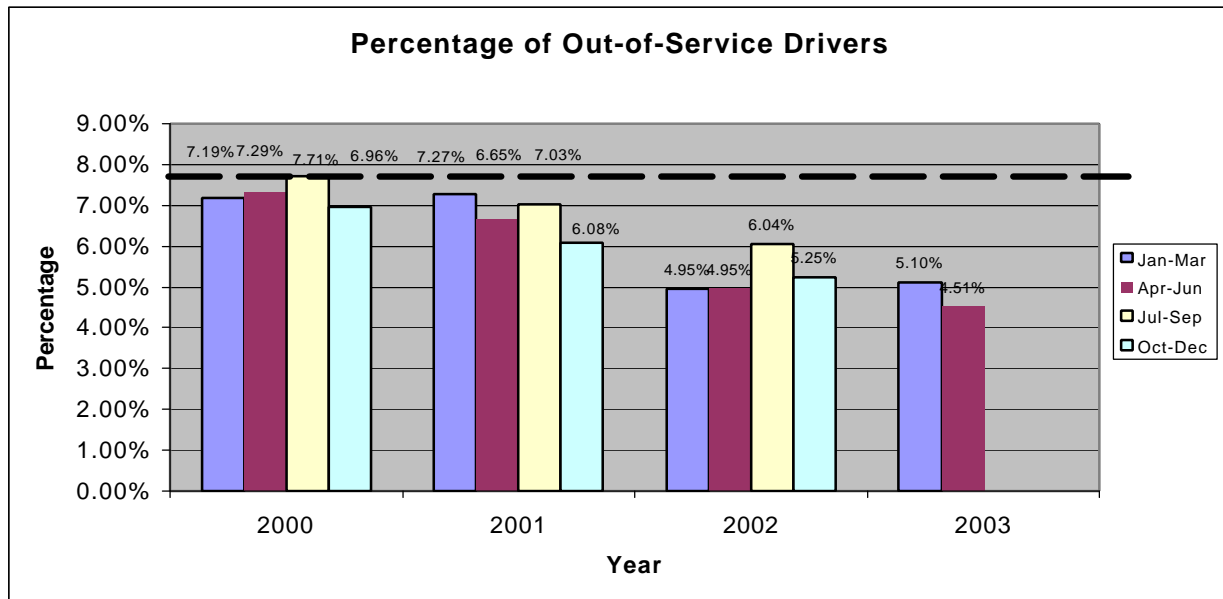
### Method

Data are received and compiled from North American Standard inspection reports that have been completed by Kentucky Vehicle Enforcement (KVE) Officers and Inspectors. The data are entered into a federal database called SafetyNet. The SafetyNet program offers comparison reports showing quarterly statistics of Kentucky's Commercial Vehicle compliance rates.

This year a new method of computing the Out-of Service Rate was started. The Out-of-Service Driver percentages are now calculated based only on drive-specific safeties (omitting Level 3 and Level 4 Safeties), in order to produce a better representation of the activity.

### Improvement/Results

Low or decreasing Out-of-Service rates indicate safer Commercial Vehicle Drivers. As drivers comply with medical restrictions, licensing restrictions, and daily drive-time restrictions, driver fatigue has been cited as a causative factor in Commercial Motor Vehicle accidents, compliance to regulation increases, and therefore, safety potential increases. Kentucky's intent is to meet the national average (7.7%), and to help set a standard for a safety-conscious level.



#### **KVE Officers and Inspectors Completed:**

**75,676** Driver Inspections in 2000

**79,672** Driver Inspections in 2001

**106,990** Driver Inspections in 2002

— 7.7%=National Average



## Inspection of Commercial Vehicles Carrying Hazardous Materials

### Background

With the onset of additional safety precautions nationwide, due to the terrorist events of September 11, 2001, it has become vital to National Security to maintain a safe and secure hazardous materials transportation system.

### Purpose

Measuring and tracking the numbers of hazardous materials safety inspections performed ensures that drivers and vehicles are compliant with requirements. Hazardous materials are specified in section 103 of the Hazardous Materials Transportation Act.

### Method

Data are received and compiled from North American Standard inspection reports that have been completed by Kentucky Vehicle Enforcement Officers and Inspectors. The data are entered into a federal database called SafetyNet. The SafetyNet program offers comparison reports showing quarterly statistics of Kentucky's Commercial Vehicle compliance rates.

### Improvement/Results

Historically, Hazardous Materials (HazMat) Inspections have not been a high priority mission for Kentucky Vehicle Enforcement (KVE) personnel. With the continued threat of terrorism, KVE hopes to significantly raise the number of HazMat Inspections in order to assure safety on the highways of the Commonwealth.



## Portable Weighs

### **Background**

Commercial vehicles traveling by-pass routes around fixed weigh facilities are often overweight and/or not in compliance with State and Federal Regulations. Allowing such vehicle traffic to travel our roadways, without having to stop for checks for compliance to regulations can effect the safety of the traveling public and cause damage to our road infrastructure.

### **Purpose**

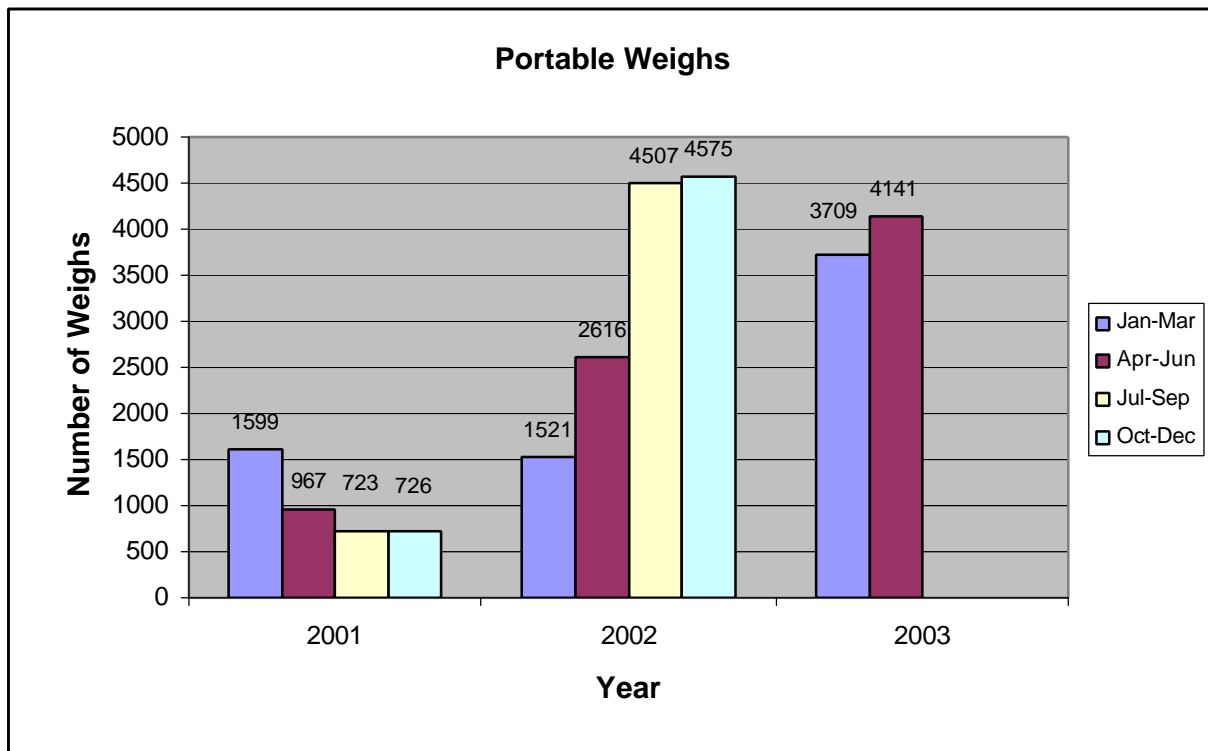
Measuring and tracking portable weigh activity is directly tied to availability of Federal Grant funding.

### **Method**

Data are received from Kentucky Vehicle Enforcement officer's monthly activity reports, prepared in statistical form, reviewed for overall weight enforcement compliance, and reported quarterly.

### **Improvement/Results**

Increasing the number of portable weighs completed by Kentucky Vehicle Enforcement officers ensures compliance with the Federal Highway Administration's expectations for commercial vehicle weight enforcement on our roadways. Our ability to meet these expectations assures the state retention of Federal allocation of road-building dollars. As of June 2003, we have completed 7,850 portable weighs, which puts us on target to meet our Portable Weigh Target Goal of 14,000.



## OSHA Recordable Incident Rate

### **Background**

We consider our people our most important asset; their safety is of utmost importance. It is the Cabinet's desire to maintain a safe and healthy work environment that enhances the well being of its people.

### **Purpose**

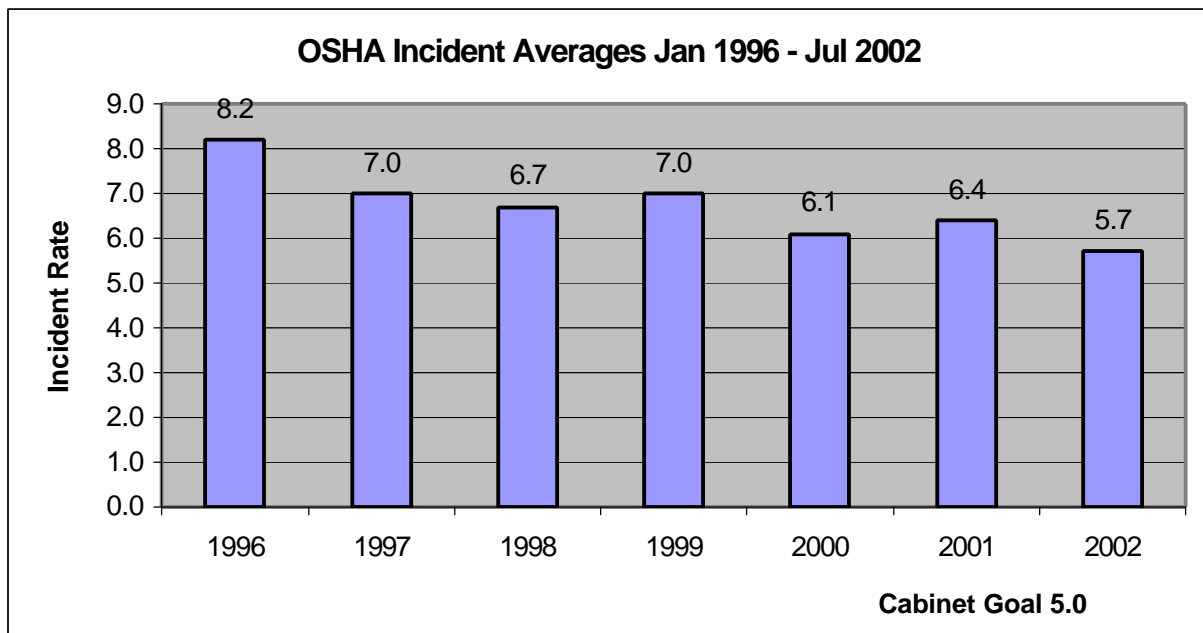
This measure is used to track employee safety on-the-job, which reflects on employee well being, satisfaction, and retention.

### **Method**

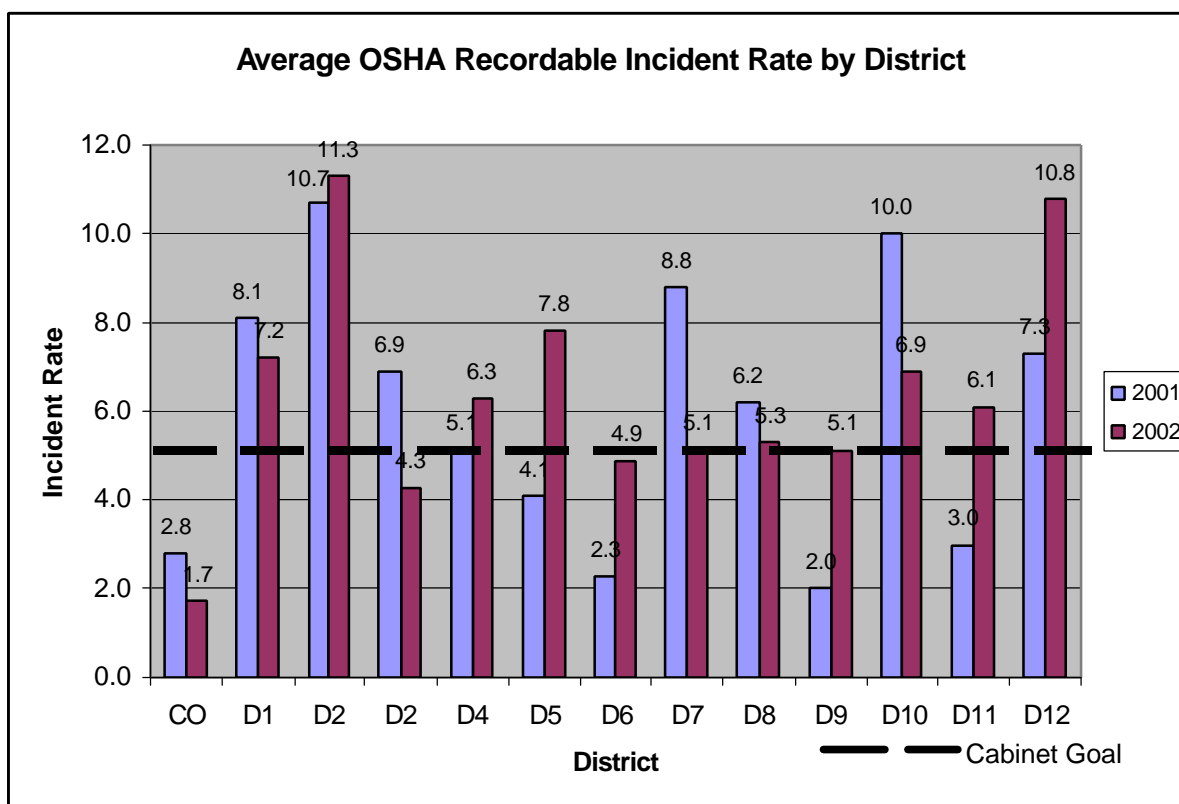
Data are compiled from monthly injury reports submitted by each Highway District. The incident rate is calculated per 200,000 hours of work exposure or per 100 employees. The formula for calculating incident rates is the number of OSHA Recordable Injuries x 200,000 divided by total hours worked. OSHA information is collected based on calendar year, not fiscal year, so 2003 data is not available at this time.

### **Improvement/Results**

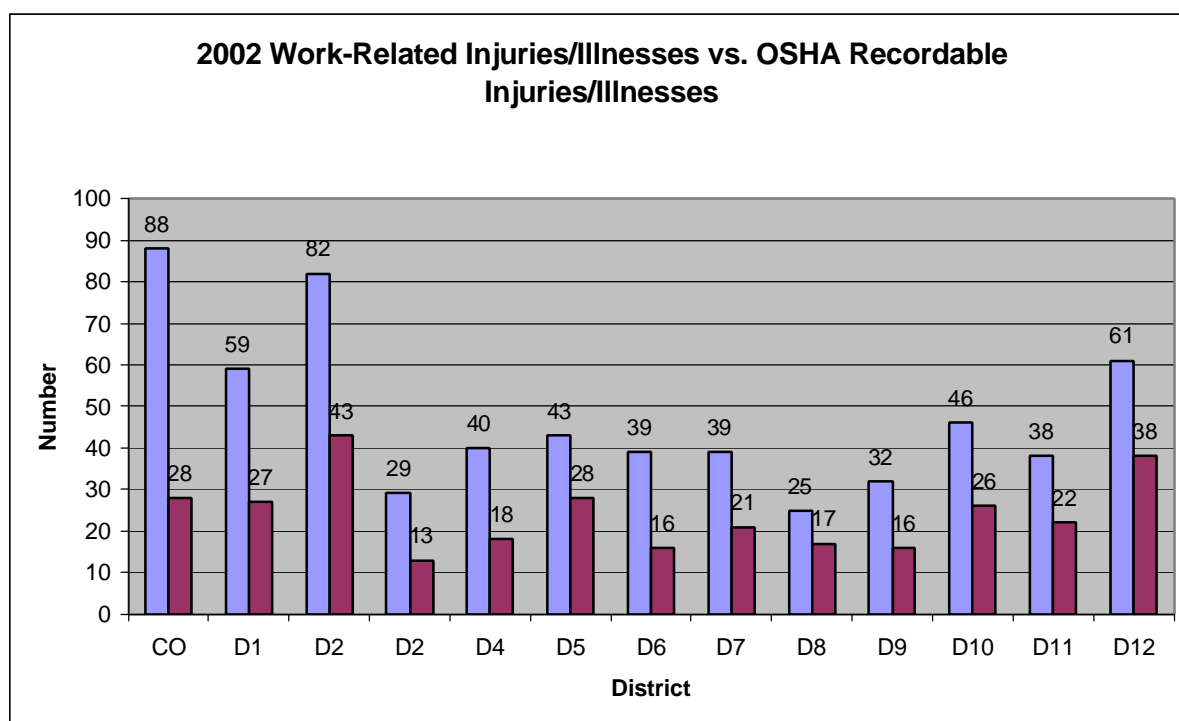
A decrease indicates improvement. Data for 2002 includes OSHA 300 Standards. Since the OSHA 300 Standards are more stringent, we expect to see a bit higher rate. The new standard classifies more injuries/illnesses as recordable. Even though there was a slight increase for 2001, an overall decrease is shown in the incident rates over the past several years.



The Cabinet has now achieved its lowest incident rate in the past seven years. This rate occurred even with the inception of the new, more stringent OSHA 300 Standards in effect. This means that the Cabinet is moving in the right direction to achieve our aggressive goal of 5.0.



Due to the more stringent requirements of OSHA 300 Standards that were introduced in 2002, the Cabinet did expect to see an increase in the Incident Rate. However, the Districts must take action to begin a downward trend in this area if we want to meet the established goal.



Work Related Injuries/Illnesses

OSHA Recordable Injuries/Illnesses